CBRA Monthly

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Dear CBRA Monthly Reader,

Checking both the CBRA team calendar as well as my personal calendar for the month of October – how quickly time flies, again…!?

This month CBRA colleague Susana Wong was focused particularly on finalizing the FAO ePhyto study, with Tom Butterly of TDAF Consulting. Next to that, she gave a great presentation at the WCO SAFE Working group meeting, on international border agency cooperation in Zambia-Zimbabwe and Albania-CEFTA & EU.

CBRA colleague Toni Mannisto did a one-week mission in Georgia, on behalf of UNECE, producing a comprehensive report titled "Regulatory and Procedural Barriers to Trade in Georgia: Needs Assessment". Thanks on behalf of Toni to all the ministries, agencies and experts who joined the interviews and/or hosted the port and border visits!

Another colleague Vladlen Tsikolenko worked hard, as usual, on FP7-CORE modeling tasks, focusing e.g. on dangerous goods standards and modeling. Matti Heikkurinen worked on the CORE standardization and policy recommendations, and Sangeeta Mohanty was busy on the DOTCOM Waste final conference arrangements.

Lastly myself, next to producing content for the CORE Learning Management System (called Canvas), also contributed a bit to two new project proposals – and of course, visited the TAPA 20 years conference in London: that was a real blast…!

Dr. Juha Hintsa
Executive Director
Cross-border Research Association
www.cross-border.org

Photo credits: TAPA EMEA Facebook page

Blog: DOTCOM Training event in Rome Sep.2017

The first DOTCOM training event took place in the heart Rome on 26-29 September 2017. It was attended by a group of about thirty trainees – mostly government officials engaged in the fight against illegal waste trade from customs, environment, port, police, and prosecution authorities across Europe and West Africa. The remaining group comprised three main instructors; members of DOTCOM partner organisations, including UNU, Germany; Tecoms, Italy; PENAf, Ghana; and myself from CBRA. The members from UNU and Tecoms supported the basic training programme by assuming the role of trainers for a few sessions.

The keynote address was delivered by Mr Renato Nitti from the Public Prosecution Office in Bari, Italy. He referred to the dual objective of the training event: i) facilitate a shared understanding of the problem and to develop a common language and ii) identify and exchange good practices. He also highlighted the main challenges associated with port inspections and the many complexities surrounding the green, amber and red channel system in ports.

The training session was divided into nine modules, namely:

- Legislative Landscape,
- Problematic Waste Streams.
- Smarter Inspections and Next Generation Compliance,
- Inspections and Detection,
- Investigation,
- Intelligence,
- Dealing with Illegal Shipments,
- Prosecution, and
- Sentencing.

The legal framework governing waste shipments is the Basel Convention and the Waste Framework Directive. Taking these as the legal basis, greater clarity was provided on what exactly constitutes waste by nailing down the key concepts and definitions of specific waste categories that serve as examples of problematic waste streams – for example refrigerants, end of life vehicles, end of life vessels, waste tyres, waste plastics, and waste paper. Concrete directions were provided for waste classification; distinction between hazardous and non-hazardous waste; and the legality of exportation of certain waste categories to OECD and specific non-OECD countries.

The presentation of smarter investigations and next

generation compliance provided advanced information on new tools and technologies for surveillance, monitoring and detection. Risk assessment and targeted waste shipment inspection formed the central part of the discussion.

The module on Inspection and Detection focused on three phases: risk identification, risk analysis and evaluation, and prioritisation. Working with risk profiling and risk indicators were recommended. Some risk indicators can be determined from the description of the goods; the packaging style and labelling; and the detection of broken material, rupture, perforation, leakage, etc. Multi-agency response is considered a vital support in the detection of illegal shipments.

The aim of the Investigation module was to provide practical knowledge on investigations of illicit waste trade, and a greater understanding of the different types of investigations for waste shipments and management. Discussions centred on the investigative strategies, allocation of resources, and the different phases of both upstream and downstream investigations. A few presentations shed light on new methods of data collection, analytical tools for investigation, phone data analysis, surveillance, wiretapping, and tracking devices. A new communications intelligence system called COMINT is a promising tool to help understand the ramifications of organised crime groups. Information is gathered from the communications of individuals, including telephone conversations, text messages and various types of online interactions.

Intelligence is the result of the evaluation of the relevant information available. This main subject of this module was strategic and operational intelligence to support waste enforcement. International information sharing tools, including the Interpol 24/7 system, the Europol Information

system, WCO CENCOMM and WCO ENVIRONET were discussed. A few fictive cases were presented on how to deal with illegal shipments. As an important detail, strict adherence to safety measures is recommended during port inspections.

The session on prosecution relied on real-life cases in the UK to underline some challenges involved and practical ways to address those challenges. A moot court for a hypothetical legal case was held as an illustrative example.

The concluding module on sentencing drew attention to several ambiguities of the Basel Convention and the main difficulties associated with conviction and sentencing. Convictions appear to be very limited compared to the number of prosecutions. Fines are not dissuasive and prison sentences are often not effective. Targeting the illegal wealth obtained through dissuasive penalties in lieu of small fines and short prison sentences is considered a more effective approach. A useful tactic is to look at other violations connected with waste crime, e.g. fraud, forgery, money laundering, property damage, which would provide opportunities for stronger punishments.

Each module was accompanied by a set of group exercises related to case studies to reinforce practical knowledge. Participants were advised to download the mobile waste application called WATCH-IT that was jointly developed by the UN Environment, GRID-Arendal and DOTCOM Waste. It is a useful tool to assist law enforcement officers during their inspections of waste shipments, to guide them through complex decision-making processes, while assessing the legality of shipments. Participants received instructions on how to navigate through this app and flesh out relevant information.

To complement the basic training package, participants shared their personal experiences on particularly complicated cases. A Nigerian officer presented a real-life case of WEEE exportation to Nigeria that was mis-declared as used goods. A representative from the German environmental agency described a case of illegal export of mercury from Germany via Switzerland. An officer from the Waterways Police of Hamburg spoke about a complicated case of an end-of-life vehicle that shed light on the challenges of waste identification. Guest speakers from Italy also made presentations of cases of cross-border waste trafficking in Naples - containers carrying radioactive waste, mercury and other toxic waste that pointed out the loopholes in national and EU legislation, and the absence of information exchange between countries. These

were not isolated cases but linked with organisations managing illegal shipments, underpinning the importance of investigating the entire supply chain.

The icing on the cake was the visit to the Federal Customs Agency of Italy and the historical Port of Civita Vecchia that was founded during the Roman Empire period. At the customs office, we had the opportunity to get a close look at the AIDA information system that controls complex customs operations and automates the submission of declarations in an integrated manner. It is highly useful for the monitoring, risk analysis and profiling of maritime traffic. At the port, a large container holding non-functional electronic goods was displayed. The seized shipment had been destined for Benin and has remained there for two years.

The four-day long multi-disciplinary training session offered theoretical and practical knowledge of effective investigative strategies and informed decision making for waste crimes along the EU – West Africa route. Additionally, it served as a forum for a systematic exchange of ideas and best practices to enforce illicit management and illegal trade in waste. So far, the destination countries have been stronger on the enforcement side by presenting impressive intervention rates. Therefore, more effective enforcement from the origin countries is urgently required to curb this trans-national crime.

CBRA Blog on 29.10.2017 by Dr. Sangeeta Mohanty.

PS. Please sign up to the final conference of DOTCOM Waste, in Brussels, 23.11.2017

http://www.dotcomwaste.eu/final-joint-conference/

Blog: Visiting the World Trade Forum @ Grindelwald

The National Centres of Competence in Research (NCCR Trade Regulation) is coming to an end after twelve years of work funded by the Swiss National Science Foundation (SNSF). During all of these year, the NCCR has been giving policy recommendations based on the disciplines of law, economics and political science in six different areas: WP1 Trade Governance, WP2 New Preferentialism in Trade, WP3 Innovation and Competitiveness in Trade Governance, WP4 Trade and the Diffusion of Migration Law, Policy and Economics, WP5 Trade and Climate Change and WP6 Impact Assessment in International Trade Regulation.

In light of the end of the World Trade Institute's NCCR program, researchers from each of the six work packages planned events around the world as part of the NCCR Global Series on Trade Regulation, these global series culminated with the final NCCR 'summit', which took place during the annual the World Trade Forum Conference at the Sunstar Hotel in Grindelwald, 6-7 October 2017.

The 2017 World Trade theme was "'Trade Policy in Turbulent Times". This topic seemed to be appropriate with the current economic and political landscape painted where forced migration, rising populism and opposition to globalisation are the main characters.

During this final event, I had the pleasure to see again familiar faces that I haven't seen for quite some time but also, I had the opportunity to meet legal scholars, economists, political scientists and practitioners that have been examining how the world trading system have been functioning over the last decade and the way trade impacts on areas including climate change, migration, jobs etc.

During the opening conference, Prof. Elsig (Professor of International Relations and Deputy Managing Director of the World Trade Institute (WTI) of the University of Bern) remarked how much the world had changed since the NCCR project was launched in 2005. In 12 years, there has been a proliferation of trade agreements with their own particular rules which causes more and more fragmentation and uncertainty to the multilateral system. Moreover, there has been recently an increase of scepticism in the western world about their traditional model of globalization and the role it has played in job losses. However, this scepticism has been contrasted with the strong support of free market expressed by the President of China, a well know a communist country. Despite the proliferation of preferential trade agreements, the speakers agreed that this tendency will not slow down and will play a crucial role in a world marked by global value chains. However, they also indicated that this is a wakeup call for the World Trade Organization to evolve the multilateral trade agreement and take into account the rapid change in technology. For example, ecommerce is growing 4 times faster than GDP, meaning that its necessary to create regulatory framework for this phenomenon.

Trade policy "is still alive and kicking" the speakers said, but, there are still many things to improve such as regulatory incoherence in services and goods. Lack of coherence on regulation can deeply affect the supply chain, therefore, countries still have much more work to do as well as the WTO.

Photo credits: World Trade Institute

Furthermore, many presenters agreed that structural changes (improvement of technology and digitalization of work) are the cause of job losses and not trade. Trade is usually blamed because is the easiest thing to do but in reality, digital transformation is more disruptive than trade. Maria Asenius of the European Commission indicated that trade wouldn't have happened if it wasn't beneficial for both the parties involved, in fact, she indicated that trade has been good for wealth and job creation, and "the most natural thing you can do with your clothes on".

CBRA Blog on 31.10.2017, by Ms. Susana Wong Chan

Interview with Mr. Heikkurinen, CBRA

Hi Matti! Can you please tell a bit about yourself: who you are and what you do?

I guess I'm a typical computer scientist/ software engineer turned into an informatics practitioner and research manager with a weakness for science communications. A ten-year detour as a consultant/ independent researcher/ entrepreneur between the two probably ticks the remaining boxes of "the usual story".

While the end points may seem similar at a glance, they are pretty much opposite ends of the spectrum. The initial motivation was to find an area where everything is binary, formalized and human element is ideally absent – or at least, tamed into an abstract specification. These days most of the work deals with human element, or at least the failure of the reality to comply with the theoretical specifications. Thus, the yin became the yang and an introvert an extrovert - at least in the office...

One constant has been working with distributed systems, typically in settings where the components are from different organizations or countries. Whether we are talking about the web - even web 1.0 -, cloud computing or big/ open data, you tend to see similar patterns. Success requires solving fundamental technical challenges - starting from the fact that the speed of light that is too slow -, finding semantics that work across language and cultural barriers, and coming up with operational practices and governance models that balance efficient decision making and shared sense of ownership. System tends to be as strong as the weakest link, but even defining the "weakest" is a transdisciplinary problem!

Successful logistics operations are always collaborative in nature

On the concrete level the "what I do" has ranged from developing system software for telephone switches to supporting policy work related to IT services for European research and education - network, computing and data services ranging from laptops to supercomputers supporting 50 million users. Analysis, outreach and fundraising work that I do at the moment often ends up covering surprisingly large fraction of the range – analyzing the impact of new technical specifications in order to put their potential impact into context of a joint research agenda or socioeconomic impact tend to fit a multi-pronged approach.

How did you join CBRA?

I think in the end it was inevitable, just to balance out the very improbable history of how I met Juha Hintsa, the founder of CBRA. Juha and I were at the same high school for same time - ahem, a few years ago - but even though we had common friends we never met. Two decades or so later, we had the same boss for five years – but again, never met. One more decade, and we both got curious about management of the IT systems in the cross-border trade domain, got email-introduced by our ex-boss, had several interesting chats on the phone, co-authored a conference paper sketching out the problem domain. But although we talked, a lot for two Finns, but didn't meet. In the end, some of the themes in the CORE project resonated with the ideas we had with the paper, there was a specific task that needed extra effort quickly and I got hired. We even managed to meet!

Which work you have been carrying out in CBRA while working in projects like CORE and SYNCHRO-NET?

A lot of the work has been related to different standards that both projects need to take into account in their developments. One of the interesting things, that keeps on surprising me, is the variety and sheer number of relevant standards. Global

supply chains rely on standards ranging from specifying meaning of specific bits in an RFID chip to rules balancing the privacy and law enforcement needs – and anything and everything in between. And for each domain, the saying "The wonderful thing about standards is that there are so many of them to choose from" holds true… I have also been guilty of interfering with some formal modelling tasks that capture how different supply chain actors interact, and how they could optimally interact.

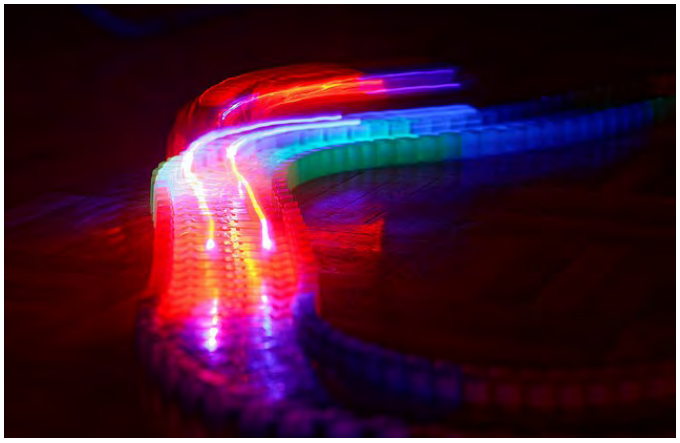
At the moment I am in the process of analyzing the standardization approach of the CORE project, distilling an overview of the experiences and identifying trends and lessons learned. These summaries will hopefully be useful for the follow-up activities as well as serving as basis for training and education material for the different target audiences of the project.

What have been the most interesting tasks that you have been assigned to in CBRA?

I think picking the most interesting task at CBRA would be very difficult. The scale and inherent complexity of the global supply chains makes the IT systems supporting them very interesting area of study. The new opportunities and challenges brought on by maturing solutions like big/open data services or blockchain technologies are especially interesting in an environment where the impact of even the tiniest incremental optimization will be measured in tens or hundreds of millions of euros, or, improved access to markets for whole nations, or reduction of environmental footprint on the global scale..

Thanks Matti for the interview, and see you again soon, in Geneva or Lausanne or somewhere else where CBRA projects may take us to…!

CBRA Interview on 30.10.2017 by Ms. Susana Wong (photos: Matti Heikkurinen)



Supply chain digitalisation - logistics at the speed of light?

Interesting video-links

(visit: http://www.cross-border.org/weblinks/videos/)

CORE Project
http://www.coreproject.eu

The real deal about the US Mexico Border by Francesca Fiorentini AJ News
https://www.youtube.com/watch?v=DDfj-DjeoT0

Brexit customs and trade impact assessment tool
https://www.youtube.com/watch?v=nxfq3GCSz20

The new Union Customs Code
https://www.youtube.com/watch?v=x8nn880BMmw

Customs protects and serves
https://www.youtube.com/watch?v=I4njPC-FKis

What is the TIR System?
https://www.youtube.com/watch?v=QEhNy1TYynM

World imports of fake goods worth nearly half a trillion USD a year
https://www.youtube.com/watch?v=5Y_woFLFmGI

A Day in the Life of Air Traffic Over the World
https://www.youtube.com/watch?v=G1L4GUA8arY

Global ship traffic seen from space - FleetMon Satellite AIS and FleetMon Explorer
https://www.youtube.com/watch?v=gtffmxJmehs

One minute in the life of the EU Customs Union
https://www.youtube.com/watch?v=hWhAcztn06k

Customs Enforcement: Our Global Contribution to Securing Borders and Trade
https://www.youtube.com/watch?v=C1YO7bXlMdo

Rhenus Logistics - Schiphol SmartGate Cargo
https://www.youtube.com/watch?v=uaMGuN36Ao0

Cargo theft / TAPA
https://www.youtube.com/watch?v=CBnu8yO8Bmc&feature=youtu.be

CISCO SCS
https://www.youtube.com/watch?v=97Tnjr72IoQ

Maritime Port Authority of Singapore
https://www.youtube.com/watch?v=PcJGqBFeoxo

CORE Information Observatory

Read the full reviews at http://www.cross-border.org/core-observatory/core-observatory-full-list/

Supply chain security culture: measure development and validation, 2009 (CORE1200)

Researchers have stressed the importance of having an organizational culture that highlights proactivity and vigilance toward supply chain security breaches. In security-focused supply chain management environment workers are empowered to detected and handle supply chain security threats without seeking formal permission from supervisors and managers. Company security strategy gives specific attention how SCS concepts are embedded into firm processes and procedures. Alignment with organizational culture and business or corporate-level strategies is believed to result in enhanced organizational performance. In addition, organization culture encompasses supply chain continuity management. The paper presents a scale for measuring supply chain security culture defined as the overall organizational philosophy that creates supply chain security as a priority among its employees through embracing and projecting norms and values to support secure activities and to be vigilant with security efforts.

The study makes possible to assess how implemented FP7-CORE security technologies, tools and practices influence on supply chain resilience based on the perception of company managers and employees. The article gives also guidelines how to develop survey forms and protocols in order to assess the influence of implemented security measures on other KPIs such as supply chain visibility and reliability. The survey tools based on perceived operational and organizational changes complete toolbox to measure impacts of introduced security interventions.

CORE Information Observatory

The effect of supply chain security management on security performance in container shipping operations, 2012 (CORE1201)

Several authors have clustered supply chain security measures into different categories, but only few authors have provided statistical models to test how well these categories can be used to assess benefits of security measures. The study establishes four security categories/dimensions: facility and cargo management, accident prevention and processing, information management, and partner relationship management. The results imply that partner relationship management is positively related to customs clearance performance. Further, information management and partner relationship management are positively related to safety performance. However, facility and cargo management and accident prevention and processing were not found to have substantial positive impacts on security performance what is controversial to many safety studies. Improved access control, material handling, information processing and reporting of anomalies are clearly factors that are positively related to safety performance based on several work place safety studies. The difference is probably due to questions that defined safety performance: the study addressed accidents and property damages while safety studies measure often near misses and their reporting.

The FP7 CORE project utilizes key performance Indicators (KPIs) to assess and monitor organization's performance at the operational level. Two CORE KPI's measure address safety and customs clearance performance, consequently the supply chain security framework can well be adapted on the CORE context. Improved access control, cargo handling, shipping information processing and reporting of anomalies can be measured by using the construct for 'facility and cargo management'. CORE Training and education can be embedded into the factor 'accident prevention and processing' that captures documenting and disseminating of security information. 'Partner relationship management' can be tested as a mediating factor that controls how strongly implemented CORE interventions influence on organizational performance indicators in specific demonstrations. Customs agencies can consider using four dimensions of supply chain security as criteria for assessing security performance in container shipping firms. Finally the dimensions and attributes of the framework provide a tool to analyse qualitative data in the project where getting reliable quantitative data is challenging.

Featured video clip!

PostNord caught criminal gang red handed

https://www.youtube.com/watch?v=0I64CF3SR0k&feature=share

CORE Information Observatory

Enhancing security through efficiency focus- Insights from a multiple stakeholder pilot implementation (Sternberg et al. 2012)

This article is relevant for CORE demonstrations that focus on sea port operations (WP10-11 and WP13-15 and WP17). The research shows how a 'common information sharing platform' - an electronic and highly automated communication network among LSPs, carriers, ferry operators, port operators and authorities – increases logistics efficiency and security performance simultaneously. The main components of this platform include information sharing through a common information area, real-time geographical position of truck and trailer, identification technology in truck, RFID tags on transport units and RFID readers mounted on terminals, electronic manifest, and electronic container seals. More specifically, Sternberg et al. (2012) observed that adoption of a set of IT-enabled SCS solutions eliminated logistics efficiency and security issues simultaneously:

- Real-time geo-positioning of trucks and trailers enabled the port operator to allocate a vacant spot for a trailer prior to its arrival, which reduced the waiting time at the port entrance. The real-time information enabled also customs to detect anomalies in shipping schedules and routings that would imply a heightened risk of smuggling.
- RFID-based identification of drivers, trucks, and trailers automated and accelerated the access formalities at the port entrance and increased reliability of driver authentication.
- Digitalization of cargo manifests eliminated the time-consuming manual document handling and reduced the risk of unauthorised access to confidential information.
- E-seals enabled customs officers to identify intact containers and spare them from time- consuming inspections.

Global supply chain design considerations: Mitigating product safety and security risks (Speier et al. 2011)

The paper of Speier et al. (2011) is quite theoretical and it has therefore only a limited impact on CORE work. It is useful for people for the CORE demonstrators to be aware of various supply chain design strategies and factors that support their selection. All in all, the paper introduces an interesting table that shows what supply chain factors typically affect selection of certain supply chain design strategies (see table below). The paper also includes a useful discussion about the nature of supply chain security risks. The authors point out that supply chain security covers risks of contamination, damage and destruction of products or other supply chain assets, and that these risks may arise from intentional or unintentional activities.

Table 8
Summary of significant main and interaction effects.

Supply chain factors influencing security efforts	Supply chain disruption design themes			
	Process management	Information sharing	SC partner security management	Server provider management
Risk level	M	M		
Supply chain complexity	M	M	M	M
Risk level × supply chain complexity	I	I		I
Coupling			M	M
Mindfulness	M	M	M	M
Coupling × mindful	I			
Risk level × coupling	I			

M = significant main effect; I = significant interaction effect.

CORE Information Observatory

Supply chain efficiency and security: Coordination for collaborative investment in technology (Lee et al. 2011)

Lee et al. (2011) consider the SCS performance rather narrowly as the organization's ability to locate and eliminate the source of a product contamination. This is a rather unorthodox approach: scholars commonly consider SCS performance in terms of capability to prevent, detect and recover from crime that takes place in the supply chain context. But regardless of the narrow scope, the paper provides useful information how about to protect cargo from hostile tampering cost-effectively. This is particularly relevant for the CORE demonstrator with fast-moving consumer goods of Procter & Gamble (WP17). Also partners involved in the development of educational and training material are going to benefit from the findings of this research paper.

Recent CBRA publications

Grainger A., and Hintsa J. (2017). The role of border management in implementing trade policy goals. Brussels: European Parliament.

Hintsa, J. (2017), "Supply Chain Security (SCS) Compendium: A Decade of SCS Research", HEC University of Lausanne, Switzerland & Riga Technical University, Latvia.

Urciuoli, L. and Hintsa, J. (2017), "Improving Supply Chain Risk Management – Can additional data help?", Accepted for publication in International Journal of Logistics Systems and Management.

Hintsa J., Männistö T., Mohanty S., Kähäri P., Wong Chan S., Phan TTH., Salas Chaverri D., Ruyters T., Hameri AP., Tsikolenko V., and Rudzitis N. (COMCEC 2016). Improving the border agency cooperation among the OIC member states for facilitating trade. Final report. Standing Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation. Ankara, Turkey, 6.10.2016.

Urciuoli, L. and Hintsa, J. (2016), "Adapting supply chain management strategies to security - an analysis of existing gaps and recommendations for improvement", International Journal of Logistics Research and Applications, pp. 1-20.

Urciuoli, L. and Hintsa, J. (2016), "Differences in security risk perceptions between logistics companies and cargo owners", International Journal of Logistics Management, Volume 27 Issue 2.

Hintsa J., Urciuoli L. and Tan Y. (2016), "Panel on Authorized Economic Operator (AEO) Benefits and Trusted Trade Lanes", 11th WCO PICARD Conference, Manila, the Philippines.

Wong, S., Phan, TTH. and Chizhikov, S. (2016), "Panel on Trafficking and Illicit Trade - Case Costa Rica, Vietnam and Russia", 11th WCO PICARD Conference, Manila, the Philippines.

12th Annual WCO PICARD Conference, Tunis, 26-28 September 2017

Submission for a Panel titled "Measuring Trade Facilitation and Border Management Performance"

The panel concerns itself with measuring trade facilitation and border management performance. Following on from the recent WTO Trade Facilitation Agreement there is urgent demand for robust trade facilitation assessment mythologies. The UNECE, in its recently revised Recommendation No.42 reiterates that demand. And indeed, there are already a number of established indicators to draw upon, including, for example, the WCO's Time Release Study. In this panel, we question whether prevailing indictors are sufficient, and offer fresh perspectives that draw one wider academic literature as well as research.

Panel papers discuss alternative approaches and new perspectives that draw on research practice and established academic theories. In the case of Panel Paper 1, by Dr Juha Hintsa and Dr Toni Mannisto, it is about measuring customs derived societal benefits. In the case of Panel Paper 2, by Dr Andrew Grainger and Dr Duncan Shaw, it is about improving the overall quality of trade facilitation and agreeing performance indicators within a system that characterised by many different stakeholders.

Each session includes extensive interaction with the audience to help stimulate new ideas, test prevailing assumptions and provide an opportunity for creating new knowledge.

The Panel moderator is: Robert Lüssi, Vice Commissioner, Federal Customs Administration, Switzerland.

Panel Session 1: Customs True Societal Protection Performance -index

- Dr Juha Hintsa, Executive Director, Cross-border Research Association (CBRA)
- Dr Toni Mannisto, Cross-border Research Association (CBRA)

Abstract: In the past, there have been only limited efforts to capture the overall performance of border management, under a single metric, which would help governmental decision-makers to better target budgets and to justify future border management investments. This PICARD2017 panel introduces a new comprehensive

metric for measuring holistic impacts of border management. This model, developed by the Cross-border Research Association, has been created as part of the FP7-project CORE, in cooperation with several customs experts. The proposed index, Customs True Societal Protection Performance (CTSPP),

$$\text{CTSPP} = \frac{NI_TH_T+NI_RH_R}{NH_R} = \frac{N(I_TH_T+I_RH_R)}{NH_R} = \frac{I_TH_T+I_RH_R}{H_R}$$

$$= \frac{(8\times14)+(2\times4)}{4} \times 100\% = \underline{30\%}$$

measures effectiveness and efficiency of customs controls at borders, and it can be used to estimate overall protection benefit that custom bring for the society. This panel session will give an overview of the model and invite participants to critically evaluate it for its feasibility and usefulness as a border management decision-making tool.

Presenting the baseline model with a simple numeric example
N = Total number of containers imported = 2 million
IT = Targeted inspection rate = 8%
HT = Hit rate with targeted inspections = 14%
IR = Random inspection rate = 2%
HR = Hit rate with random inspections = 4%
Examples of new parameters / ideas for improving the model:
Increasing the model granularity, by splitting current "total imported containers" (and, the follow-up calculations) into following sub-sets:

- Mode of transport (treat separately maritime containers, sea bulk, air containers, trucks, rail wagons etc.)
- High-risk country of origin (e.g., Colombia for drugs) versus low-risk countries

- Sensitive / high-risk goods (e.g., cigarettes and dangerous goods) versus goods that are low-risk (low tax, non-dangerous, low value etc.)
- Trusted traders & supply chains (AEO or other custom/security certification) versus "non-trusted / unknown operators / companies with low track record of compliance"

Other ideas to improve the model accuracy and/or usefulness:

- Instead of containers, customs declarations could be used as the basis for calculations
- Distinction between inspection methods (data, documents, x-ray, opening container etc.) – with different hit rates, lead times, costs etc.
- Distinction between threat types and their socio-economic negative consequences (fiscal, health and safety, environment, marketplace distortion etc.)
- Hit rates of other border control agencies could be included (e.g. food and health inspection)
- Also, aspects of routing (most economic versus non-economic) and packed versus empty containers could be considered

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Panel Session 2: A Proposed Method for Measuring Trade Facilitation

- Dr Andrew Grainger, Trade facilitation expert and academic, University of Nottingham
- Dr Duncan Shaw, Data scientist, University of Nottingham

Abstract: The objective of trade facilitation is to reduce the impact of trade related red-tape. Much of that red-tape (fairly or unfairly) is attributed to Customs. And, the WTO Trade Facilitation Agreement will hold countries accountable to how well they facilitate trade. But as yet, there is little consensus about how to assess the trade facilitation related performance of customs agencies, or the performance of any other parties involved in trade and border related controls (whether public or private sector). Methods for evaluating the quality of trade facilitation measures and the performance of relevant parties still need to be defined and agreed.

One key challenge is the overall complexity (e.g. multiple stakeholders, different interests and priorities, different types of commercial arrangements) and dynamic nature of international supply chain operations (e.g. subject to economic cycles, commercial opportunities, competitive forces, changes in trade policy, disruptive technologies). To address these challenges a new methodological tool is proposed, which is based on a wider trade system perspective. This method aims to be sufficiently flexible to accommodate evolving requirements. It also aims to safeguard sufficient accountability for trade and customs policy makers to act upon.

The underlying framework has six steps: i. identify and describe processes; ii. identify and describe stakeholder; iii. identify and describe stakeholder needs; iv. define key Performance Indicators (KPIs); v. system wide consultation cycles; and vi. commitment to continuous improvement by repeating steps.

At present the methodology is untested, but it draws on established and proven theories from the social sciences, in particular the complex system and performance measurement literature – especially with regards to developing and agreeing Key Performance Indicators across supply chains. Participants in the panel are invited to share experiences, reflect upon the proposed methodology, and explore with the presenters whether implementation in the various WCO member countries is feasible.

Panel Discussion Points

- How do the new perspectives offered in the above papers differ from the current status quo? What value do they have for customs and others?
- What types of institutions are needed to broker consensus on performance targets and communicate them effectively to others at the local, national, bilateral, regional and international level?
- How long would it take to develop systems and institutions to support trade facilitation and customs related performance targets? What is required?

External News Headlines September 2017 onwards

Read all the news at http://www.cross-border.org/news/

26.10.2017: Infrastructure deficit remains a major challenge to #TradeFacilitation in Africa. It is estimated that Africa needs about USD $93 billion annually until 2020 to close the infrastructure gap - http://allafrica.com/stories/201710270653.html

17.10.2017: New Infographics - Human trafficking: nearly 16.000 victims in the EU - http://www.europarl.europa.eu/news/en/headlines/society/20171012STO85932/human-trafficking-nearly-16-000-victims-in-the-eu

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12.10.2017: Freight forwarders urged to comment on likely post-Brexit skills gaps - https://www.ajot.com/news/freight-forwarders-urged-to-comment-on-likely-post-brexit-skills-gaps

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4.10.2017: Presentations and proceedings of UN/CEFACT Conference on Blockchain are on-line #TradeFacilitation - http://www.unece.org/tradewelcome/un-centre-for-trade-facilitation-and-e-business-uncefact/meetings-and-events/uncefact/other-meetings/2017/uncefact-conference-on-blockchain/doc.html

4.10.2017: The VAT system in the EU is outdated and exploited by fraudsters and criminals. It is estimated that around €50 Billion is lost due to VAT cross-border carousel fraud. - https://ec.europa.eu/taxation_customs/business/vat/action-plan-vat/single-vat-area_en

3.10.2017: New cohort joins master programme for customs and supply chain - https://www.rsm.nl/about-rsm/news/detail/13583-new-cohort-joins-master-programme-for-customs-and-supply-chain/

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28.9.2017: 41% of smokers dependent on #IllicitTrade - http://www.betterretailing.com/41-smokers-dependent-illicit-trade/

27.9.2017: The State of Palestine and the Solomon Islands become INTERPOL member countries - https://www.interpol.int/en/News-and-media/News/2017/N2017-121

26.9.2017: UPS Reveals #SupplyChainSecurity System - http://www.pharmtech.com/ups-reveals-supply-chain-security-system

20.9.2017: Customs bottlenecks are among the most common obstacles cited by the humanitarian community to delivering aid quickly. Humanitarian Relief: The most urgent reason for #TradeFacilitation - http://www.globaltrademag.com/global-logistics/humanitarian-relief-urgent-reason-trade-facilitation

Read all Event entries at:
http://www.cross-border.org/events/

8th Middle East Security Conference & Exhibition
5-7 November 2017, Bahrain

19th ACM International Conference on Multimodal Interaction
13-17 November 2017, Glasgow, Scotland

Supply Chain Risk Management Forum
15-16 November 2017, Berlin, Germany

Reflections on Trade Facilitation and Border Crossing
15 November 2017, Geneva, Switzerland

ODASCE 2017
16-17 November 2017, France

European Big Data Value Forum 2017
21-23 November 2017, Versailles, France

Milipol Paris 2017
21-24 November 2017, Paris, France

Africa Border Management and Security Conference
28- 29 November 2017, Johannesburg, South Africa

UK Security Expo
29- 30 November 2017, London, England

6th International Conference on Dynamics in Logistics, (LDIC) 2018
20-22 February 2018, Bremen, Germany

10th IATA World Cargo Symposium
13-15 March 2018, Dallas, United States

30th European Customs Conference
07-08 June 2018, Thun, Switzerland

Homeland Security and Crisis Management
25-28 October 2018, Nice, France

PLEASE CONTACT US WITH ANY QUESTIONS OR SUGGESTIONS:

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